CHAPTEE VI

THERMAL CONDITIONS IN THE GASIFICATION OF CAEBON

THE reactions reviewed in the foregoing do not always take place in the manner assumed, and not under all conditions, as their progress is frequently forcibly interrupted. The most substantial factor is the temperature produced during

TABLE A.

Length of bed of Coke. Centimetres.	Amounts of N collected in a minute.	« Temperature.	Gas Analysis in Volumes per cent.		
			C02.	o.	CO.
17	19-9	375°	0-5 '	20	0
10	6-1	394°	1-1	20-1	0
17	32-2	395°	1-6	17-4	0-5
10	7-1	401°	6-2	12-3	0-8
10	6*1	495°	19	0	1-6
11	2-5	675°	19-8	0	1-1
10	22-3	677°	19	0	1-1
33	61	680°	18-9	0-2	1-7
33	17-9	700°	19-3	0-3	2-5
33	119-3	700°	17-3	1*4	3-3
17	10-7	700°	18	0	2-5
44	35-8	750°	19-4	0	2-7
10	8-9	800°	17-9	0	5-9
11	10-8	875°	11	0	14-7
11	24-5	900°	10-1	0	15-8
11	1-2	950°	0-6	0	31-5
11	2-2	1,000°	0	0	34-2

the process. By way of example, as the result of experimental research, the influence of the air on the carbon according to the reaction 0+20 = C02 commences at about 375°. • At this temperature, however, oxygen present only to an amount of about 0'5 per cent, of the weight of air is utilised, whilst the B.S.

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